NOTIFICATION OF ADDENDUM

ADDENDUM NO. 1

DATED 3/06/2009

Control	**0921-06-185**
Project	**STP 2006(315)**
Highway	**CR**
County	**CAMERON**

Ladies/Gentlemen:

Attached please find an addendum on the above captioned project. Included in the attachment is an adendum notification which details the changes and the respective proposal pages which were added and/ or changed.

Except for new bid insert pages, it is unnecessary to return any of the pages attached.

Bid insert pages must be returned with the bid proposal submitted to the Department, unless your firm is submitting a bid using a computer print out. The computer print out must be changed to reflect the new bid item information.

Contractors and material suppliers, etc. who have previously been furnished informational proposals are not being furnished a copy of the addendum. If you have a subcontractor on the above project, please advise them of this addendum. Acknowledgment of this addendum is not requested if your company has been issued a proposal stamped “This Proposal Issued for Informational Purposes.”

You are required to acknowledge receipt of this addendum on the Addendum Acknowledgement form contained in your bid proposal by placing a mark in the box next to the respective addendum.

Failure to Acknowledge receipt of this addendum in your bid proposal will result in your bid not being read.

04/99

SUBJECT: PLANS AND PROPOSAL ADDENDUMS

PROJECT: STP 2006(315) CONTROL: 0921-06-185
COUNTY: CAMERON
LETTING: 03/10/2009
REFERENCE NO: 0306

PROPOSAL ADDENDUMS

_ PROPOSAL COVER
X BID INSERTS (SH. NO.: 1 THROUGH 9 OF 9)
X GENERAL NOTES (SH. NO.: J)
X SPEC LIST (SH. NO.: 3 OF 4)
_ SPECIAL PROVISIONS:
ADDED:

DELETED:

X SPECIAL SPECIFICATIONS:
ADDED: 4035

DELETED:

X OTHER: PLAN SHEETS

DESCRIPTION OF ABOVE CHANGES
(INCLUDING PLANS SHEET CHANGES)

BID INSERTS-
****
REVISED QUANTITY FOR THE FOLLOWING BID ITEMS: 402-2001, 420-2003, 428-2001, 432-2001, 464-2090, 464-2091, 465-2109, 496-2007, 530-2011, 644-2022, 666-2048, 666-2111, 4269-2001

ADDED THE FOLLOWING BID ITEMS: 164-2035, 316-2421, 464-2094, 506-2002, 506-2009, 4035-2009, 4061-2001, 4061-2010, 4061-2012, 4061-2014, 4061-2021, 5261-2001

REMOVED THE FOLLOWING BID ITEMS: 164-2023, 316-2023, 506-2003, 530-2017, 4061-2008, 4061-2009, 5261-2002

BID INSERT SHEETS 1 THROUGH 9 OF 9 CHANGED AS A RESULT OF THE ABOVE QUANTITY REVISIONS.

GENERAL NOTES-
****
SHEET J: ADDED ITEM 540

DESCRIPTION OF ABOVE CHANGES (CONTINUED)
(INCLUDING PLANS SHEET CHANGES)

SPEC LIST-
****
ADDED SPECIAL SPECIFICATION 4035

SPEC LIST SHEET 3 OF 4 CHANGED AS A RESULT OF THE ADDITION

PLAN SHEETS-
****
SHEET 2: UPDATED INDEX TO REFLECT PLAN SHEET CHANGES

SHEET 3: UPDATED PROJECT LAYOUT PER NEW INTERSECTION ALIGNMENT

SHEETS 11-14: UPDATED SEEDING AREA CALLOUTS AND GEOGRID TYPE I

SHEET 15: UPDATED DRIVEWAY QUANTITIES AND GEOGRID TYPE I

SHEET 16: UPDATED QUANTITIES FOR ITEMS 464, 4061, AND ADDED ITEM 4035

SHEET 19: UPDATED QUANTITIES FOR ITEMS 644 AND 666

SHEETS 23, 23A: REVISED E&Q SHEETS TO REFLECT ALL QUANTITY CHANGES

SHEET 24D: ADDED ITEM 540 TO THE GENERAL NOTES

SHEET 28: UPDATED ADVANCED WARNING SIGNS LOCATIONS

SHEET 70: UPDATED CALLOUT OF EXISTING IRRIGATION CROSSING

SHEET 71: UPDATED INTERSECTION DETAILS

SHEET 84: UPDATED DRIVEWAY TABLES AND TOTALS; ELIMINATED "TURNOUTS"

SHEET 100: UPDATED HYDROLOGIC TIME OF CONCENTRATION AND HYDRAULIC TAILWATER INFORMATION

SHEET 101: UPDATED HYDRAULIC TAILWATER INFORMATION

SHEETS 102A: NEW SHEET WITH PROJECT CULVER H&H INFORMATION

SHEETS 104-106: UPDATED STORM DRAIN TABLE ADDING INLET EXTENSIONS

SHEET 107: UPDATED CALLOUT OF EXISTING IRRIGATION CROSSING

SHEET 119: UPDATED HYDRAULIC INFORMATION

SHEET 120: UPDATED CALLOUT OF EXISTING IRRIGATION CROSSING

SHEETS 121-122: UPDATED HYDRAULIC INFORMATION

SHEET 123: ADDED NEW TRENCH EXCAVATION AND BACKFILL DATA

SHEET 124: DELETED SHEET FROM PLANS

SHEET 125: INCREASED QUANTITY FOR ITEM 464 RCP SPL BY EXTENDING CASING TO
DESCRIPTION OF ABOVE CHANGES (CONTINUED)
(INCLUDING PLANS SHEET CHANGES)

LEFT AND RIGHT R-O-W LINES

SHEETS 126, 126A: INCREASED QUANTITY FOR ITEM 464 RCP SPL BY EXTENDING CASING TO LEFT AND RIGHT R-O-W LINES; UPDATED ITEMS 496 & 4061; ADDED DETAIL FOR RIPRAP

SHEETS 127, 127A: INCREASED QUANTITY FOR ITEM 464 RCP SPL BY EXTENDING CASING TO LEFT AND RIGHT R-O-W LINES; UPDATED ITEM 4061, AND CORRECTED ITEM 4035

SHEET 128: UPDATED HYDRAULIC INFORMATION, ITEM 464 BYPASS PIPE QUANTITY, AND SIPHON CAST IN PLACE CONSTRUCTION METHOD NOTES

SHEETS 131, 132, 139: DELETED SUPERFLUOUS STANDARD SHEETS FROM PLANS

SHEETS 140, 141A: MODIFY STANDARD FOR NEW WATER-TIGHTNESS REQUIREMENTS

SHEET 144: UPDATED QUANTITIES FOR ITEMS 420 AND 428

SHEET 176: UPDATED SIGNING PLAN AT INTERSECTION

SHEET 179: UPDATED SUMMARY OF SMALL SIGNS

SHEETS 188, 190: UPDATED PAVEMENT MARKING DETAILS FOR INTERSECTIONS

SHEET 196: UPDATED WATER RESOURCE ISSUES

SHEET 196A: ADDED EPIC DATA SHEET

SHEET 197: UPDATED SW3P SEDIMENT CONTROLS

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	100	2002	002	PREPARING ROW DOLLARS and CENTS	STA	91.660	1
	104	2022		REMOVING CONC (CURB AND GUTTER) DOLLARS and CENTS	LF	2,800.000	2
	106	2001		OBLITERATING ABANDONED ROAD DOLLARS and CENTS	STA	10.000	3
	110	2001		EXCAVATION (ROADWAY) DOLLARS and CENTS	CY	42,762.000	4
	110	2002		EXCAVATION (CHANNEL) DOLLARS and CENTS	CY	1,135.000	5
	132	2006		EMBANKMENT (FINAL)(DENS CONT)(TY C) DOLLARS and CENTS	CY	9,968.000	6
	164	2035	004	DRILL SEEDING (PERM) (RURAL) (CLAY) DOLLARS and CENTS	SY	66,019.000	7
	164	2041	004	DRILL SEEDING (TEMP) (WARM) DOLLARS and CENTS	SY	66,019.000	8
	204	2003		SPRINKLING (DUST CONTROL) DOLLARS and CENTS	MG	379.000	9
1	247	2225	026	FL BS (RDWY DEL)(TY E GR 4)(FNAL POS) DOLLARS and CENTS	CY	19,971.000	10

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
1	251	2056		RWRK BS MTL(TY B)(8")(DEN CNT)(ORG POS) DOLLARS and CENTS	CY	955.000	11
	260	2011	001	LIME TRT (EXST MATL) (12") DOLLARS and CENTS	SY	56,436.000	12
1	260	2043	001	LIME (HYD, COM OR QK)(SLURRY) DOLLARS and CENTS	TON	1,571.000	13
1	260	2049	001	LIME TRT(MIX EXST MATL & NEW BASE)(14") DOLLARS and CENTS	SY	54,675.000	14
	305	2002		SALV, HAUL & STKPL RCL APH PV (0 TO 2") DOLLARS and CENTS	SY	5,531.000	15
	310	2001		PRIME COAT (MC-30) DOLLARS and CENTS	GAL	10,486.000	16
	316	2174		AGGR(TY-B GR-4 SAC-B) DOLLARS and CENTS	CY	410.000	17
	316	2421		ASPH (AC-10 OR HFRS-2P) DOLLARS and CENTS	GAL	14,702.000	18
	341	2136	020	D-GR HMA(QCQA) TY-D SAC-B PG76-22 DOLLARS and CENTS	TON	8,381.000	19
	354	2016		PLAN & TEXT CONC PAV(0" TO 1-1/2") DOLLARS and CENTS	SY	816.000	20

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	400	2007	007	STRUCT EXCAV (SPECIAL) DOLLARS and CENTS	CY	70.000	21
	402	2001		TRENCH EXCAVATION PROTECTION DOLLARS and CENTS	LF	3,003.000	22
	416	2001	001	DRILL SHAFT (18 IN) DOLLARS and CENTS	LF	72.000	23
	416	2004	001	DRILL SHAFT (36 IN) DOLLARS and CENTS	LF	836.000	24
	420	2003	002	CL C CONC (ABUT) DOLLARS and CENTS	CY	90.500	25
	420	2004	002	CL C CONC (BENT) DOLLARS and CENTS	CY	57.200	26
	420	2008	002	CL C CONC (WINGWALLS) DOLLARS and CENTS	CY	86.000	27
	420	2051	002	CL C CONC (COLUMN) DOLLARS and CENTS	CY	61.500	28
	422	2001		REINF CONC SLAB DOLLARS and CENTS	SF	22,337.000	29
	425	2004	001	PRESTR CONC BEAM (TY IV) DOLLARS and CENTS	LF	3,730.200	30
	428	2001	001	CONC SURF TREAT (CLASS I) DOLLARS and CENTS	SY	2,040.000	31

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	432	2001		RIPRAP (CONC)(4 IN) DOLLARS and CENTS	CY	476.000	32
	432	2039		RIPRAP (MOW STRIP)(4 IN) DOLLARS and CENTS	CY	35.000	33
	450	2008		RAIL (TY T502) DOLLARS and CENTS	LF	382.800	34
	450	2020		RAIL (TY C502) DOLLARS and CENTS	LF	360.800	35
	450	2025		RAIL (TY PR1) DOLLARS and CENTS	LF	386.800	36
	454	2001		SEALED EXPANSION JOINT (4 IN)(SEJ-A) DOLLARS and CENTS	LF	134.000	37
	462	2013		CONC BOX CULV (6 FT X 6 FT) DOLLARS and CENTS	LF	32.000	38
	462	2034		CONC BOX CULV (10 FT X 10 FT) DOLLARS and CENTS	LF	167.000	39
	464	2089		RC PIPE (CL III)(18 IN)(SPL) DOLLARS and CENTS	LF	484.000	40
	464	2090		RC PIPE (CL III)(24 IN)(SPL) DOLLARS and CENTS	LF	621.000	41
	464	2091		RC PIPE (CL III)(30 IN)(SPL) DOLLARS and CENTS	LF	215.000	42

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	464	2094		RC PIPE (CL III)(48 IN)(SPL) DOLLARS and CENTS	LF	343.000	43
	464	2096		RC PIPE (CL III)(60 IN)(SPL) DOLLARS and CENTS	LF	1,977.000	44
	465	2005	001	MANH (COMPL)(TY M) DOLLARS and CENTS	EA	2.000	45
	465	2103	001	INLET (COMPL)(TY F) DOLLARS and CENTS	EA	14.000	46
	465	2109	001	INLET EXT (TY F) DOLLARS and CENTS	EA	10.000	47
	465	2122	001	INLET (COMPL)(SPL) DOLLARS and CENTS	EA	20.000	48
	467	2286		SET (TY II)(18 IN)(RCP)(6:1)(P) DOLLARS and CENTS	EA	6.000	49
	467	2288		SET (TY II)(24 IN)(RCP)(6:1)(P) DOLLARS and CENTS	EA	4.000	50
	496	2002		REMOV STR (INLET) DOLLARS and CENTS	EA	7.000	51
	496	2003		REMOV STR (MANHOLE) DOLLARS and CENTS	EA	7.000	52
	496	2007		REMOV STR (PIPE) DOLLARS and CENTS	LF	2,726.000	53

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	496	2008		REMOV STR (BOX CULVERT) DOLLARS and CENTS	LF	80.000	54
	500	2001	005	MOBILIZATION DOLLARS and CENTS	LS	1.000	55
	502	2001	033	BARRICADES, SIGNS AND TRAFFIC HANDLING DOLLARS and CENTS	MO	11.000	56
	506	2002	013	ROCK FILTER DAMS (INSTALL) (TY 2) DOLLARS and CENTS	LF	24.000	57
	506	2009	013	ROCK FILTER DAMS (REMOVE) DOLLARS and CENTS	LF	24.000	58
	506	2017	013	CONSTRUCTION EXITS (INSTALL) (TY 2) DOLLARS and CENTS	SY	156.000	59
	506	2019	013	CONSTRUCTION EXITS (REMOVE) DOLLARS and CENTS	SY	156.000	60
	506	2026	013	FRNT END LOADER WORK (ERSN & SEDM CONT) DOLLARS and CENTS	HR	40.000	61
	508	2002		CONSTRUCTING DETOURS DOLLARS and CENTS	SY	4,722.000	62
	529	2012		CONC CURB & GUTTER (TY A)(BARRIER) DOLLARS and CENTS	LF	15,750.000	63

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	529	2033		CONC GUTTER (TY A) VALLEY GUTTER DOLLARS and CENTS	LF	228.000	64
	530	2011		DRIVEWAYS (ACP) DOLLARS and CENTS	SY	2,846.000	65
	531	2044	006	CURB RAMPS (TY 10) DOLLARS and CENTS	EA	2.000	66
	540	2001	002	MTL W-BEAM GD FEN (TIM POST) DOLLARS and CENTS	LF	775.000	67
	540	2005	002	TERMINAL ANCHOR SECTION DOLLARS and CENTS	EA	4.000	68
	540	2011	002	MTL BEAM GD FEN TRANS (THRIE-BEAM) DOLLARS and CENTS	EA	4.000	69
	544	2001	001	GUARDRAIL END TREATMENT (INSTALL) DOLLARS and CENTS	EA	2.000	70
	644	2022		INS SM RD SN SUP&AM TY S80(1) SA(P) DOLLARS and CENTS	EA	16.000	71
	662	2004	001	WK ZN PAV MRK NON-REMOV (W) 4" (SLD) DOLLARS and CENTS	LF	3,000.000	72
	662	2032	001	WK ZN PAV MRK NON-REMOV (Y) 4" (SLD) DOLLARS and CENTS	LF	6,000.000	73
	662	2113	001	WK ZN PAV MRK SHT TERM (TAB) TY W DOLLARS and CENTS	EA	1,389.000	74

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	662	2115	001	WK ZN PAV MRK SHT TERM (TAB) TY Y-2 DOLLARS and CENTS	EA	700.000	75
	666	2003	008	REFL PAV MRK TY I (W) 4" (BRK)(100MIL) DOLLARS and CENTS	LF	4,160.000	76
	666	2012	008	REFL PAV MRK TY I (W) 4" (SLD)(100MIL) DOLLARS and CENTS	LF	694.000	77
	666	2036	008	REFL PAV MRK TY I (W) 8" (SLD)(100MIL) DOLLARS and CENTS	LF	840.000	78
	666	2048	008	REFL PAV MRK TY I (W) 24"(SLD)(100MIL) DOLLARS and CENTS	LF	250.000	79
	666	2111	008	REFL PAV MRK TY I (Y) 4" (SLD)(100MIL) DOLLARS and CENTS	LF	21,621.000	80
	666	2132	008	REFL PAV MRK TY I (Y) 24"(SLD)(100MIL) DOLLARS and CENTS	LF	420.000	81
	668	2064		PREFAB PAV MRK TY B (W) (ARROW) DOLLARS and CENTS	EA	5.000	82
	672	2012	034	REFL PAV MRKR TY I-C DOLLARS and CENTS	EA	218.000	83
	672	2015	034	REFL PAV MRKR TY II-A-A DOLLARS and CENTS	EA	1,036.000	84
	4035	2009		RC LOW HEAD PRSSR PIPE (CL III)(36") DOLLARS and CENTS	LF	79.000	85

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	4061	2001		IRRIGATION GATE (18") DOLLARS and CENTS	EA	1.000	86
	4061	2010		IRRIGATION WELL (36") DOLLARS and CENTS	EA	2.000	87
	4061	2012		IRRIGATION WELL (48") DOLLARS and CENTS	EA	3.000	88
	4061	2014		WELL GATE (24") DOLLARS and CENTS	EA	2.000	89
	4061	2021		IRRIGATION WELL (60") DOLLARS and CENTS	EA	1.000	90
	4269	2001		PRESS IRRIG PVC PIPE (18 IN) DOLLARS and CENTS	LF	300.000	91
	4269	2003		PRESS IRRIG PVC PIPE (24 IN) DOLLARS and CENTS	LF	389.000	92
	5049	2003		BIODGRD EROSION CONTROL LOGS (12" DIA) DOLLARS and CENTS	LF	146.000	93
	5261	2001		GEOGRID BASE REINFORCEMENT (TY I) DOLLARS and CENTS	SY	53,322.000	94
				ALTERNATE NO. 1A DOLLARS and CENTS			

ALT	ITEM-CODE			UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	ITEM NO	DESC CODE	S.P. NO.				
	247	2041	026	FL BS (CMP IN PLC)(TY A GR 1)(FNAL POS) DOLLARS and CENTS	CY	20,926.000	95
	260	2043	001	LIME (HYD, COM OR QK)(SLURRY) DOLLARS and CENTS	TON	830.000	96

GENERAL NOTES:

For all pits or quarries, comply with the "Texas Aggregate Quarry and Pit Safety Act."

Provide on a weekly basis a list of equipment, including idle equipment, utilized on the project that week.

The 1-800 call services for utility locations do not include TxDOT facilities. Contact the Pharr District Signal Section (956-702-6225) for coordination with TxDOT underground lines.

ITEM 5. Control of the Work

Prior to contract letting, bidders may obtain a free computer diskette or a computerized transfer of files (from the Engineer's office) that contains the earthwork information. If copies of the actual cross-sections in additional to, or instead of, the diskette are requested, they will be available at the Engineers office for borrowing by copying companies for the purpose of making copies for the bidder at the bidders expense.

ITEM 7. Legal Relations and Responsibilities to the Public.

404 Permit Requirements:

The Contractor shall note that discharge of permanent or temporary fill material into the waters of the United States (U.S.), Including jurisdictional wetlands, as necessary for construction, will require specific approval of the U.S. Army Corps of Engineers (USACE) under section 404 of the clean water act.

TxDOT will obtain the appropriate permit (s), nationwide or individual, when necessary as dictated by project specific conditions and the potential to affect USACE jurisdictional areas. The Contractor may review the permitted plans at the office of the Area Engineer in charge of construction. TxDOT will hold the Contractor responsible for following all conditions of the approved permit. If the Contractor cannot work within the limits or scope of this permit (s), then it becomes the Contractor's entire responsibility to consult with the USACE on the need for changes or amendments to the conditions of the existing permit (s) as originally obtained by TxDOT. However, the Contractor may request TxDOT to assist in this process by providing complete and specific revised details for TxDOT review and submittal to the USACE. For off Project right of way coordination, the Contractor or his agent shall handle all activities directly with the USACE.

It is essential that any impacts to USACE jurisdictional waters of the U.S., Including jurisdictional wetlands, be the minimum necessary to complete the proposed work. If the

contractor needs further explanation of the conditions of the permit, including means of compliance, they may contact the Pharr District Environmental Coordinator.

The contractor shall not initiate activities in a project specific location (PSL) associated with a U.S. Army Corps of Engineers (USACE) permit area that have not been previously evaluated by the USACE as part of the permit review of this project. Such activities include, but are not limited to, haul roads, equipment staging areas, borrow and disposal sites. Associated defined here means materials are delivered to or from the PSL. The permit area includes all waters of the U.S. or associated wetlands affected by activities associated with this project. Special restrictions may be required for such work. The contractor shall be responsible for any and all consultations with the USACE regarding activities, including project specific locations (PSLs), that have not been previously evaluated by the USACE. The Contractor shall provide the department with a copy of all consultation(s) or approval(s) from the USACE prior to initiating activities.

The contractor may proceed with activities in PSLs that do not affect a USACE permit area if a self determination has been made that the PSL is non-jurisdictional or proper USACE clearances have been obtained in jurisdictional areas or have been previously evaluated by the USACE as part of the permit review of this project. The contractor is solely responsible for documenting any determination(s) that their activities do not affect a USACE permit area. The contractor shall maintain copies of their determination(s) for review by the department or any regulatory agency.

The total area disturbed for this project is 52 acres. The disturbed area in this project, all project locations in the Contract, and the Contractor project specific locations (PSLs), within 1 mile of the project limits, for the Contract will further establish the authorization requirements for storm water discharges. The Department will obtain an authorization to discharge storm water from the Texas Commission on Environmental Quality (TCEQ) for the construction activities shown on the plans. The Contractor is to obtain required authorization from the TCEQ for Contractor PSLs for construction support activities on or off the ROW. When the total area disturbed in the Contract and PSLs within 1 mile of the project limits exceeds 5 acres, provide a copy of the Contractor NOI for PSLs on the ROW to the Engineer and to the local government that operates a separate storm sewer system.

ITEM 8. Prosecution and Progress

In order to expedite the approval process for PSL’s or to eliminate or minimize potential impacts to project progress, initiate coordination efforts with the U.S.A.C.E. **within 30 days from the date of “authorization to begin work”.** If this is not done, the contractor waives the right to request any contract time considerations if project progress is impacted and PSL’S approval is still pending.

Requests submitted to the area engineer will be evaluated on this basis, and will require documentation showing substantial early coordination efforts to expedite the approval process as herein stated. The request shall include a detailed chronological summary status with dates of coordination activities with the resource agencies, including those occurring after the initial coordination, to be reviewed and confirmed by the district's environmental section.

Working days will be computed and charged in accordance with Article 8.3.A.1 Five-Day Workweek.

The maximum number of working days for computing the incentive credit for the completion of the project is 20 days.

Where road closures or detours around structures are necessary to accomplish proposed work, the removal of existing structures and/or cutting of existing pavement will not be permitted until all pre-cast members for the proposed structure have been cast, tested and approved for use.

ITEM 132. Embankment

Embankment (DENS CONT) shall be Type C with a max. PI of 40. Borrow used as embankment material in the top two feet below the bottom of Flexible Base shall meet the following requirements based on preliminary tests and such other tests found necessary by the Engineer.

1. The material shall be such as to produce a well-bonded embankment and shall have a minimum PI of 8 and a maximum PI of 30.

It is the Contractor's responsibility to advise the Engineer of the location of the source sufficiently in advance to avoid delay.

ITEM 164. Seeding for Erosion Control

During drill seeding operations, application methods shall be in accordance with the method shown in the Standard Specification Book.

SS-1 Tacking Agent shall be a ratio of 2:1, two (Emulsion) to one (water) and applied at a rate of 0.05 gallons per square yard. The SS-1 Tacking Agent required for Drill Seed operations, will not be paid for directly, but will be subsidiary to Item 164 "Drill Seeding". Watering shall not be used with the Drill Seed Method.

Cool Season or Warm Season Grasses shall be included as part of Item 164 (See Table 4A or 5 in the Standard Specification Manual for dates and seed type).

Seed mixture

Seed mixture shall be as specified under Item 164.

ITEM 166. FERTILIZER

Fertilizer rate is based on a rate of 100 Lbs. of Nitrogen per acre. The Nitrogen-Phosphorous-Potassium (NPK) ratio shall include a minimum of 5 percent phosphorous and 5 percent Potassium. Fertilizer shall be homogenized.

ITEM 247. Flexible Base

Flexible Base (TY E GR 4) shall conform to the following requirements:

BEFORE LIME IS ADDED

Retained on Sq. Sieve	Percent Retained
2”	0
½”	20-60
No. 4	40-75
No. 40	70-90
Max. PI:	15
Max. Wet Ball PI:	15
Wet Ball Mill Max Amount:	50
Min. Comp. Strength PSI:	150 at 15 psi lateral pressure

The Wet Ball Test (Tex-116-E) shall be run and the Plasticity Index of the material passing the No. 40 sieve shall be determined (Wet Ball PI).

After 1% lime (laboratory) is added to unlimed material

Max PI	12
Min. Comp. Strength PSI:	180 at 15 psi Lateral Pressure
Triaxial Test (Lime Treated)	Tex-121-E

Two (2) percent lime (by weight) will be incorporated into the Flexible Base in the field at the State's expense in accordance with the provisions of Items 260.

The percent of density as determined by Compaction Ratio (Tex-113-E) for the new Flexible Base shall be a minimum of 98%.

The Contractor's attention is called to the fact that certain existing and/or proposed structures may be within the limits of the Flexible Base. It shall be the Contractor's responsibility to perform construction operations without damage to these structures.

ITEM 251. Reworking Base Material

Quantities of Flexible Base to be salvaged, shown on the typical sections, are for estimating purposes only. All acceptable base material encountered in existing base is to be salvaged as directed by the Engineer regardless of the quantities involved.

Salvaged base shall be used in the bottom course on any of the proposed roadway and/or turnout sections.

Salvaged base may be used on any of the proposed driveway sections.

ITEM 260. Lime Treatment (Road Mixed)

The Contractor's attention is called to the fact that certain existing and/or proposed structures are within the limits of the lime-treated Subgrade. Unless otherwise directed by the Engineer, these structures shall be installed before the final rolling of this Subgrade. It shall be the Contractor's responsibility to perform the proper lime treating operation without damage to these structures.

The slurry method of applying lime will be required, except when the lime is to be added to naturally wet materials as directed by the Engineer.

For this project, the Engineer will direct a random number of lime trucks to be check weighed.

The lime shall be added to the Flexible Base and/or salvage base at a central mixing site or mixing plant away from the construction area. The Engineer shall approve the site or plant location and method of mixing.

The percent of density as determined by Tex-121-E for the new and salvage Flexible Base shall be a minimum of 98% for all courses.

ITEM 300. Asphalt’s, Oils and Emulsions

Temporary ramps/detours and driveways may use performance grade binder 64-22.

ITEM 301. Asphalt Antistripping Agents

Lime TY A or B shall be added as an Antistripping additive between the rates of 1 % minimum 2.0% maximum by weight for items 316 & 341. If the Hamburg wheel test cannot be met within

these limits, Liquid Antistripping agents as approved by the Engineer may be used in conjunction with lime for items 316 & 341.

ITEM 305. Salvaging, Hauling, and Stockpiling Reclaimable Asphalt Concrete

Stockpile the material at 1106 E. Markowsky Ave., Harlingen (APPROX. 4 miles NE), (location address).

ITEM 310. Prime Coat (Cutback Asphaltic Material)

The Contractor shall exercise diligence in the application of asphalt by the use of flagging and rolling procedures to keep from spraying or splattering the traveling public with asphaltic material.

ITEM 314. Emulsified Asphalt Treatment

The Contractor shall exercise diligence in the application of emulsified asphalt by the use of flagging to keep from spraying or splattering the traveling public with asphaltic material.

ITEM 316. Surface treatments

In addition to cleaning by brooming of paved surfaces to be sealed as required by this Item, blading may also be necessary to clean dirt and grass from edges of the pavement and/or turnout areas. The cost of this blading will not be paid for directly, but will be considered subsidiary to the various bid Items of the project.

The type and grade of asphalt as shown on the plans and/or as directed by the Engineer, shall be used on these projects. Asphalt cement will be used during the warm season (usually April 15th to September 15th). An emulsified asphalt will be used during the cooler season (usually September 15th to April 15th), if permitted in writing by the Engineer. The emulsified asphalt, if used, shall be HFRS-2P. Estimated quantities shown for the bid Item is based on an average of the estimated rates of application for asphaltic cement and emulsified asphalt. These rates should be used for estimating and comparison purposes only.

The one or two-course surface treatment shall be in place for a sufficient period of time in the opinion of the Engineer, for the surface treatment to properly dry and cure before placing the Asphaltic Concrete Pavement.

Traffic will not be permitted on the surface treatment unless authorized by the Engineer.
ITEM 341. Dense-Graded Hot-Mix Asphalt (QC/QA)

The contractor shall exercise diligence in the application of "Tack Coat" by the use of flagging and rolling procedures to keep from spraying or splattering the traveling public with asphaltic material.

Blading (not to exceed more than 3-ft from the pavement edge) may also be necessary to clean dirt and grass from pavement edges and turnout areas as work under this bid Item. The cost of this blading will not be paid for directly, but shall be considered subsidiary to this bid Item.

This project will require the following minimum aggregate Classifications:

County	CSJ	Highway	Classification
Cameron	0921-06-185	Dixieland Rd.	B

Lime shall be used as an anti-stripping agent for this project.

All longitudinal joints adjacent to a travel way shall be constructed with a joint maker providing a maximum ½-inch vertical edge and a minimum 6:1 edge taper or as approved by the Engineer.

The Hamburg wheel Test requirement for PG 64 binder will be 5,000 passes @ 0.5 inch rut depth.

ITEM 400. Excavation and Backfill for Structures

If the Contractor elects to cut pavement (existing/detour) for structural work beyond that required by the construction phasing shown in the plans and approved by the Engineer, it shall be restored at his expense and backfilled to its original condition or better in accordance with Item 400.

ITEM 420. Concrete Structures

Use membrane curing, Type 2, for concrete curb, gutter and combined curb and gutter, concrete medians, directional islands and sidewalks.

ITEM 421. Portland cement Concrete

Provide equipment at the batch plant for determining the free moisture and/or absorption of aggregates in accordance with applicable TXDOT Test.

Provide the following items for concrete batch inspection in accordance with specifications outlined in DMS-10101, “Computer Equipment”:

(1) One Desktop Microcomputer or One Laptop Microcomputer
(2) One Integrated Printer/Scanner/Copier/Fax Unit
(3) Contractor-Furnished Software
(4) Hardware

ITEM 432. Riprap

Provide Class "A" concrete minimum for riprap aprons placed around all box culvert and pipe safety end treatments.

ITEM 462. Concrete Box Culverts and Sewers

Provide joints in pre-cast concrete box culverts using any of the methods specified in Item 464, except mortar joints.

Provide pre-cast concrete boxes to expedite traffic handling unless otherwise shown on the plans.

Provide the Area Engineer with the casting schedule of all pre-cast concrete boxes prior to beginning any fabrication.

ITEM 464. Reinforced Concrete Pipe

Use tongue and groove pipe where the RCP extends into the lime treated subgrade. The 4-foot depth restriction for heavy equipment passage over pipe structures is voided. The Contractor will be responsible for any construction damage to these facilities.

Do not use mortar joints.

All reinforced concrete pipe shall include rubber gaskets unless shown otherwise on the plans or directed by the engineer.

ITEM 466. Headwalls and Wingwalls

Do not use pre-cast headwalls/wingwalls.

ITEM 467. Safety End Treatment

All Type II SET's shall have riprap, Class "A" minimum, aprons as shown on the plans. The contractor may submit an alternate precast SET design for approval by the Engineer.
ITEM 471. Frames, Grates, Rings and Covers

All grates will be tack welded to the frames in a manner satisfactory to the Engineer.

ITEM 502. Barricades, Signs and Traffic Handling

Shadow vehicles equipped with Truck-Mounted Attenuators are required.

Replace/relocate all regulatory signs removed due to construction operations with a same sign on fixed support(s) immediately upon its removal. First obtain project Engineer approval before removing any regulatory roadway sign. Required flaggers are to be available to direct traffic during sign intermediate down time.

Relocate any Directional Sign Assemblies removed during construction operations immediately upon their removal.

These signs shall be relocated to a location in accordance with the Latest Version of the "Texas Manual on Uniform Traffic Control Devices". In no case will a sign be removed without a replaceable sign and support(s) being readily available and a location established. Removal and relocation of these signs required for traffic control will not be paid for directly, but shall be considered subsidiary to Item 502.

ITEM 504. Field Office and Laboratory

Furnish (1) Field Office (Type C).

Provide the following items in accordance with specifications outlined in DMS-10101, "Computer Equipment":
Furnish (1) laptop computer, (1) Secure Digital (SD) Card and Reader/Writer and (1) integrated printer/fax/copier and internet service. Provide broadband internet service where available.

The Contractor will furnish a Type D Structure (Asphalt Mix Laboratory) modified by the following.

Laboratory room:

The other room of this building will be used as a laboratory and will include access to a bathroom facility from the interior. The laboratory and bathroom facility will have the walls, ceiling and floor insulated such that the air temperature can be maintained at 76 degrees Fahrenheit at all times.

Furnish for the Department's use in the asphalt laboratory one (1) desktop computer.

ITEM 529. Concrete Curb, Gutter and Combined Curb and Gutter

Before final acceptance of the project, remove discoloration caused by tire marks, mud, asphalt, paint or other similar material by any method satisfactory to the Engineer to achieve a uniform color and texture of the finished surface exposed to view.

ITEM 530. Driveways and Turnouts

Prime coat shall meet the requirements of Item 310.

Daily testing requirements for Hot Mix Asphaltic Concrete Pavements for drives, commercial entrances and/or turnouts may be waived by the Engineer.

ITEM 540. Metal Beam Guard Fence

The optional terminal anchor post with the terminal connector will be required as shown on the Metal Beam Guard Fence Standard.

ITEM 585. Ride Quality for Pavement Surfaces

Quality control results shall be submitted to TxDOT the next working day after each day's paving.

Pavement areas with public turnout intersections that carry major traffic volumes will not be subjected to inertial profiler testing. These areas shall be evaluated using the 10-ft. Straightedge.

Diamond grinding shall be used to remove localized roughness.

Use Surface Test Type B pay adjustment schedule 1 to evaluate ride quality of the travel lanes in accordance with Item 585, "Ride Quality for Pavement Surfaces." This includes ramps and service road travel lanes.

ITEMS 636, Aluminum Signs

Complete sign blanks and panels shall be handled and stored at the job site in such a manner that corners, edges and faces are not damaged. Finished sign blanks shall be stored in either a weatherproof warehouse or outside and off the ground in a vertical position. All paper, cardboard and chemically treated separators and packaging shall be removed prior to outside storage.

ITEM 644, Small Roadside Sign Supports and Assemblies

All signs shall be installed as shown in the plans and in accordance with the current edition of the "Texas Manual on Uniform Traffic Control Devices".
All signs shall be erected according to the locations shown on the signing layout sheets except that the Engineer may shift a sign in order to secure a more desirable location. The Contractor will stake all sign locations as shown in the plans and approved by the Engineer. It is the intent of the plans to erect all roadside traffic signs with the sign edge a minimum of 6 feet from the

edge of the shoulder, or if none, 12 feet from the edge of the travel lane. In curb and gutter sections the sign edge shall be a minimum of 2 feet from the face of the curb.

For this project, the Contractor will be required to provide aluminum type of sign blanks as provided for under Item 636 for all proposed signing installed under Item 644. Aluminum sign blanks less than 7.5 square feet shall be 0.08 inch thick, sign blanks 7.5 to 15 square feet shall be 0.100 inch thick and sign blanks greater than 15 square feet shall be 0.125 inch thick.

All excess excavation shall be spread uniformly inside the right of way as directed by the Engineer and shall be included in the price of these Items.

Sign types which design details are not shown on the plans shall conform with the latest edition of the Department's "Standard Highway Sign Design for Texas" Manual.

The Contractor shall remove the complete sign installation and separate the sign post at the concrete foundation. The Contractor shall dispose of the concrete foundation in accordance with this Bid Item. Except for concrete foundations, all removed sign panels, sign posts, and hardware shall remain the property of the Department. All removed sign installations shall be completely disassembled. All salvageable sections of sign panels shall be recycled by TxDOT. The Contractor will be required to haul the removed sign material to the maintenance yard closest to the project. No signs shall be removed without prior approval of the Engineer.

ITEM 658, Delineator and Object Marker Assemblies

Delineator assemblies shall be installed 8 feet from the edge of the shoulder unless restricted by some obstruction, in which case, the delineator assembly shall be placed between 2 and 8 feet from the edge of the shoulder.

Bi-directional installation of object markers shall be by any method satisfactory to the Engineer.

ITEMS 662 AND 666, Work Zone Pavement Markings and Reflectorized Pavement Markings

All permanent pavement markings and work zone pavement markings for this project under these Items shall be 0.100 inches (100 mil) thick thermoplastic.

Any permanent pavement markings or non-removal work zone pavement markings lacking reflectivity in accordance with test method Tex 828-B, will not be paid for, as per district policy. The Contractor will be required to restripe at his own expense.

Before the roadways are overlaid, the Contractor will be responsible for noting and recording the location and configuration of all existing pavement markings for use in installing the final

permanent pavement marking. All roadways are to be striped as existing, unless otherwise noted in the plans or as determined by the Engineer.

Pavement surface preparation for markings and markers will not be paid for directly, but shall be considered subsidiary to Item 666.

Prior to any striping operations, an on-site coordination meeting between the prime and Sub Contractor superintendents and the TxDOT inspector will be required to review striping details and requirements to ensure quality work. This does not relieve the striping Contractor from required adherence to plans and Specifications.

The beads used on this project shall meet the requirements of Departmental Materials Specification DMS-8290, Glass Traffic Beads Texas Type III.

ITEM 677, Eliminating Existing Pavement Markings and Markers

Asphalt and aggregate types and grades shall be as approved in writing by the Engineer when a surface treatment is used to eliminate existing pavement markings.

ITEM 4061. Irrigation Wells, Gates and Valves

If the Contractor elects, a larger size Item may be furnished and installed at no extra cost to the State.

ITEM 5261. Geogrid Base Reinforcement

Provide a construction plan to the engineer detailing how the base will be lime treated without damaging the Geogrid Base Reinforcement placed on top of the subgrade.

CONTROL : 0921-06-185
PROJECT : STP 2006(315)
HIGHWAY : CR
COUNTY : CAMERON

TEXAS DEPARTMENT OF TRANSPORTATION

GOVERNING SPECIFICATIONS AND SPECIAL PROVISIONS

ALL SPECIFICATIONS AND SPECIAL PROVISIONS APPLICABLE TO THIS PROJECT ARE IDENTIFIED AS FOLLOWS:

STANDARD SPECIFICATIONS: ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION JUNE 1, 2004. STANDARD SPECIFICATIONS ARE INCORPORATED INTO THE CONTRACT BY REFERENCE.

ITEMS 1 TO 9 INCL., GENERAL REQUIREMENTS AND COVENANTS
ITEM 100 PREPARING RIGHT OF WAY (103)
ITEM 104 REMOVING CONCRETE
ITEM 106 OBLITERATING ABANDONED ROAD
ITEM 110 EXCAVATION (132)
ITEM 132 EMBANKMENT (100)(204)(210)(216)(400)
ITEM 164 SEEDING FOR EROSION CONTROL (162)(166)(168)
ITEM 204 SPRINKLING
ITEM 247 FLEXIBLE BASE (105)(204)(210)(216)(520)
ITEM 251 REWORKING BASE COURSES (210)(216)(247)(520)
ITEM 260 LIME TREATMENT (ROAD-MIXED) (105)(132)(204)(210)(300)(310)(520)
ITEM 305 SALVAGING, HAULING, AND STOCKPILING RECLAIMABLE ASPHALT PAVEMENT
ITEM 310 PRIME COAT (300)(316)
ITEM 316 SURFACE TREATMENTS (210)(300)(302)(520)
ITEM 341 DENSE-GRADED HOT-MIX ASPHALT (QC/QA) (210)(300)(301)(320)(520)(585)
ITEM 354 PLANING AND TEXTURING PAVEMENT
ITEM 400 EXCAVATION AND BACKFILL FOR STRUCTURES (132)(401)(420)(421)
ITEM 402 TRENCH EXCAVATION PROTECTION
ITEM 416 DRILLED SHAFT FOUNDATIONS (420)(421)(440)(448)
ITEM 420 CONCRETE STRUCTURES (400)(404)(421)(426)(427)(438)(440)(441)(448)
ITEM 422 REINFORCED CONCRETE SLAB (420)(421)(424)(426)(430)(440)
ITEM 425 PRECAST PRESTRESSED CONCRETE STRUCTURAL MEMBERS (420)(421)(424)(426)(427)(434)(440)(442)
ITEM 428 CONCRETE SURFACE TREATMENT (427)
ITEM 432 RIPRAP (247)(420)(421)(427)(431)(440)

ITEM 450 RAILING (420)(421)(424)(440)(441)(442)(445)(446)(448) (540)
ITEM 454 BRIDGE EXPANSION JOINTS (429)(442)
ITEM 462 CONCRETE BOX CULVERTS AND STORM DRAINS (400)(420)(421) (424)(440)(464)(476)
ITEM 464 REINFORCED CONCRETE PIPE (400)(476)
ITEM 465 MANHOLES AND INLETS (400)(420)(421)(440)(471)
ITEM 467 SAFETY END TREATMENT (400)(420)(421)(430)(432)(440)(445) (460)(464)
ITEM 496 REMOVING STRUCTURES (430)
ITEM 500 MOBILIZATION
ITEM 502 BARRICADES, SIGNS, AND TRAFFIC HANDLING
ITEM 504 FIELD OFFICE AND LABORATORY
ITEM 506 TEMPORARY EROSION, SEDIMENTATION, AND ENVIRONMENTAL CONTROLS (432)(556)
ITEM 508 CONSTRUCTING DETOURS
ITEM 529 CONCRETE CURB, GUTTER, AND COMBINED CURB AND GUTTER (360) (420)(421)(440)
ITEM 530 INTERSECTIONS, DRIVEWAYS, AND TURNOUTS (247)(260)(263) (275)(276)(292)(316)(330)(334)(340)(360)(421)(440)
ITEM 531 SIDEWALKS (104)(360)(420)(421)(440)(530)
ITEM 540 METAL BEAM GUARD FENCE (421)(445)(529)(542)(544)
ITEM 544 GUARDRAIL END TREATMENTS
ITEM 644 SMALL ROADSIDE SIGN SUPPORTS AND ASSEMBLIES (421)(440) (441)(442)(445)(634)(636)(643)(656)
ITEM 662 WORK ZONE PAVEMENT MARKINGS (666)(668)(672)(677)
ITEM 666 REFLECTORIZED PAVEMENT MARKINGS (316)(318)(662)(677)(678)
ITEM 668 PREFABRICATED PAVEMENT MARKINGS
ITEM 672 RAISED PAVEMENT MARKERS (677)(678)

SPECIAL PROVISIONS: SPECIAL PROVISIONS WILL GOVERN AND TAKE PRECEDENCE OVER THE SPECIFICATIONS ENUMERATED HEREON WHEREVER IN CONFLICT THEREWITH.

REQUIRED CONTRACT PROVISIONS, FEDERAL-AID CONSTRUCTION CONTRACTS (FORM FHWA 1273, MARCH, 1994)

WAGE RATES

SPECIAL PROVISION "SCHEDULE OF LIQUIDATED DAMAGES" (000--1493)
SPECIAL PROVISION "NOTICE OF CHANGES TO U.S. DEPARTMENT OF LABOR REQUIRED PAYROLL INFORMATION" (000--1483)
SPECIAL PROVISION "IMPORTANT NOTICE TO CONTRACTORS" (000--1514)
SPECIAL PROVISION "PARTNERING" (000---002)
SPECIAL PROVISION "NOTICE TO ALL BIDDERS" (000---003)
SPECIAL PROVISION "NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY" (000---004)
SPECIAL PROVISION "DISADVANTAGED BUSINESS ENTERPRISE IN FEDERAL-AID CONSTRUCTION" (000---461)
SPECIAL PROVISION "STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS" (000---006)
SPECIAL PROVISION "ON-THE-JOB TRAINING PROGRAM" (000--1001)
SPECIAL PROVISION "CERTIFICATION OF NONDISCRIMINATION IN EMPLOYMENT" (000---009)

SPECIAL PROVISION "DEPARTMENT DIVISION MAILING AND PHYSICAL ADDRESS"
(000---011)
SPECIAL PROVISION TO ITEM 1 (001---005)
SPECIAL PROVISION TO ITEM 2 (002---013)
SPECIAL PROVISION TO ITEM 4 (004---012)
SPECIAL PROVISION TO ITEM 5 (005---004)
SPECIAL PROVISION TO ITEM 6 (006---030)
SPECIAL PROVISIONS TO ITEM 7 (007---213)(007---445)
SPECIAL PROVISIONS TO ITEM 8 (008---070)(008---084)(008---092)
SPECIAL PROVISIONS TO ITEM 9 (009---009)(009---015)
SPECIAL PROVISION TO ITEM 100 (100---002)
SPECIAL PROVISION TO ITEM 164 (164---004)
SPECIAL PROVISION TO ITEM 166 (166---001)
SPECIAL PROVISION TO ITEM 247 (247---026)
SPECIAL PROVISION TO ITEM 260 (260---001)
SPECIAL PROVISION TO ITEM 341 (341---020)
SPECIAL PROVISION TO ITEM 360 (360---003)
SPECIAL PROVISION TO ITEM 400 (400---007)
SPECIAL PROVISION TO ITEM 416 (416---001)
SPECIAL PROVISION TO ITEM 420 (420---002)
SPECIAL PROVISION TO ITEM 421 (421---031)
SPECIAL PROVISION TO ITEM 424 (424---001)
SPECIAL PROVISION TO ITEM 425 (425---001)
SPECIAL PROVISION TO ITEM 428 (428---001)
SPECIAL PROVISION TO ITEM 429 (429---008)
SPECIAL PROVISION TO ITEM 431 (431---001)
SPECIAL PROVISION TO ITEM 434 (434---003)
SPECIAL PROVISION TO ITEM 440 (440---001)
SPECIAL PROVISION TO ITEM 441 (441---002)
SPECIAL PROVISION TO ITEM 442 (442---005)
SPECIAL PROVISION TO ITEM 465 (465---001)
SPECIAL PROVISION TO ITEM 500 (500---005)
SPECIAL PROVISION TO ITEM 502 (502---033)
SPECIAL PROVISION TO ITEM 506 (506---013)
SPECIAL PROVISION TO ITEM 531 (531---006)
SPECIAL PROVISION TO ITEM 540 (540---002)
SPECIAL PROVISION TO ITEM 544 (544---001)
SPECIAL PROVISION TO ITEM 636 (636---014)
SPECIAL PROVISION TO ITEM 662 (662---001)
SPECIAL PROVISION TO ITEM 666 (666---008)
SPECIAL PROVISION TO ITEM 672 (672---034)

SPECIAL SPECIFICATIONS:

ITEM 4035 REINFORCED CONCRETE LOW-HEAD PRESSURE PIPE
ITEM 4061 IRRIGATION WELLS, GATES AND VALVES (421)(440)(464)
ITEM 4269 PRESSURE IRRIGATION PVC PIPE (400)(464)(467)
ITEM 5049 BIODEGRADEABLE EROSION CONTROL LOGS
ITEM 5261 GEOGRID BASE REINFORCEMENT

GENERAL: THE ABOVE-LISTED SPECIFICATION ITEMS ARE THOSE UNDER WHICH

------- PAYMENT IS TO BE MADE. THESE, TOGETHER WITH SUCH OTHER PERTINENT ITEMS, IF ANY, AS MAY BE REFERRED TO IN THE ABOVE-LISTED SPECIFICATION ITEMS, AND INCLUDING THE SPECIAL PROVISIONS LISTED ABOVE, CONSTITUTE THE COMPLETE SPECIFICATIONS FOR THIS PROJECT.

SPECIAL SPECIFICATION

4035

Reinforced Concrete Low-Head Pressure Pipe

1. Description. Furnish and install reinforced concrete low-head pressure pipe 12 to 108-in. inclusive, internal diameter. Install the pipe in accordance with the requirements of these specifications, to the lines and grades shown on the plans, and the classes, sizes and dimensions shown thereon. The installation of pipe includes all joints or connections to new or existing pipe, wells, vents, inlets, headwalls, etc., as may be required to complete the work.

2. Materials.

Provide reinforced concrete low-head pressure pipe that conforms to the requirements of ASTM C 361 except for the following modifications:

A. The article entitled "Classification" is hereby voided and replaced by the correspondingly named article of ASTM C 76 for Class II, III, IV and V Pipe.

B. The article entitled "Bases of Acceptance" is hereby voided and replaced by the correspondingly named article of ASTM C 76.

C. The following section of the article entitled "Materials" is supplemented by the following:

1. Cement: Type II Cement will be required unless otherwise noted on the plans.

D. All reference to methods pertaining to testing the strength of the concrete contained in articles entitled "Materials" and "Physical Test Requirements" are voided and replaced by the following:

The strength requirements for the concrete must meet the design requirements of ASTM C 76 for Class II, III, IV and V Pipe.

Perform Three-Edge Bearing tests for Classes II, III, IV and V Pipe on one pipe for each 100 pipe or fraction thereof of each size and class for the load to produce a 0.01 in. crack and, at the discretion of the Engineer, the ultimate load. Plainly mark "TEST" with durable paint on both top and bottom and do not use the pipe sections tested only to the 0.01 in. crack.

E. The article entitled "Design" is hereby voided and replaced by the correspondingly named article of ASTM C 76 with the exception of the following:

1. Circumferential Reinforcement: Use circumferential reinforcement at each end of the pipe unit that consists of 2 complete coils or rings in which the end is lapped or welded. Unless otherwise shown on the plans, the clear distance of the end coil

or ring must not be less than 1/2 in. nor more than 1 in. from the end of the pipe unit.

2. **Longitudinal Reinforcement**: Extend the longitudinals the full length of the pipe. The longitudinal bars provided in the bell may be continuous bars or spliced to the main longitudinal bars.

3. **Joints**: Construct all joints to the requirements of ASTM C 361.

F. In addition to the requirements included under the Section "Joints" of ASTM C 361, the joints must meet the following requirements (see attached typical joint drawing for illustration of joint details for pipe having an internal diameter or 12 in. to 60 in. inclusive; for pipes with internal diameters larger than 60", joint design details will be submitted to the Engineer for approval).

1. Construct a joint of all concrete design with gasket retained in a groove, using an endless gasket of round cross-section.

2. Construct the thickness of spigot shell at end of spigot that is not less than 80% of thickness of pipe shell.

3. Use a finish of the inner surface of the bell or groove and surfaces of the spigot or tongue that is in accordance to the requirements of ASTM C 443.

G. The article entitled "Physical Test Requirements" is hereby supplemented by the following:

Use a method and equipment to manufacture the pipe that produces a uniformly dense concrete free from porous areas. When tested for absorption as provided in ASTM C 76 "Absorption Test Requirement of Concrete", the absorption shall not exceed 5%.

H. The article "Hydrostatic Tests" is hereby voided and replaced with the following:

For Classes II, III, IV and V Pipe, hydrostatic tests on pipe will not be required.

I. The article entitled "Hydrostatic Test on Rubber Gasket Joints" is hereby voided and replaced with the following:

For Classes II, III, IV and V Pipe, hydrostatic tests on rubber gasket joints will not be required provided the manufacturer provides adequate gauging devices and properly checks the pipe with same to assure that all dimensions of pipe affecting water tightness of the joints are within the required tolerances. Gauge tests of pipe sections selected for other tests in the presence of the inspector.

3. **Construction.** The construction methods are to be in accordance with Item 464, "Reinforced Concrete Pipe", except for the following modifications.

A. References to jointing are hereby voided.

B. Install rubber gasket joints by forcing the spigot or tongue of each pipe section (with the gasket in place) into the bell or groove of the previously laid joint with approved device that will smoothly force the sections together and so that the gasket is properly seated

and compressed. Adequately lubricate the bell and spigot or groove and tongue with soft soap or other approved lubricant before the sections are forced together.

C. Construct angles or bends in pipe lines by using either prefabricated angle joints or a reinforced concrete collar. Unless otherwise shown on the plans, use collars of such width that each pipe section will be imbedded in the collar a minimum of 6 in. Construct the thickness of the collar outside the pipe that is a minimum of 6 in. Furnish reinforcement in the collar that consists of at least one layer of 6 in. x 6 in., No. 6 gage x 6 gage steel wire fabric or heavier, supplemented by additional circumferential reinforcing steel as required to provide reinforcing at least equal to that in the pipe. Lap the fabric at least 6 in. Furnish Class A or C concrete and form and place monolithically.

D. Where pipe connects to headwalls or wells at the bell end of pipe lines, cut off the bell and lay the pipe so that the normal pipe section extends into the headwall or well.

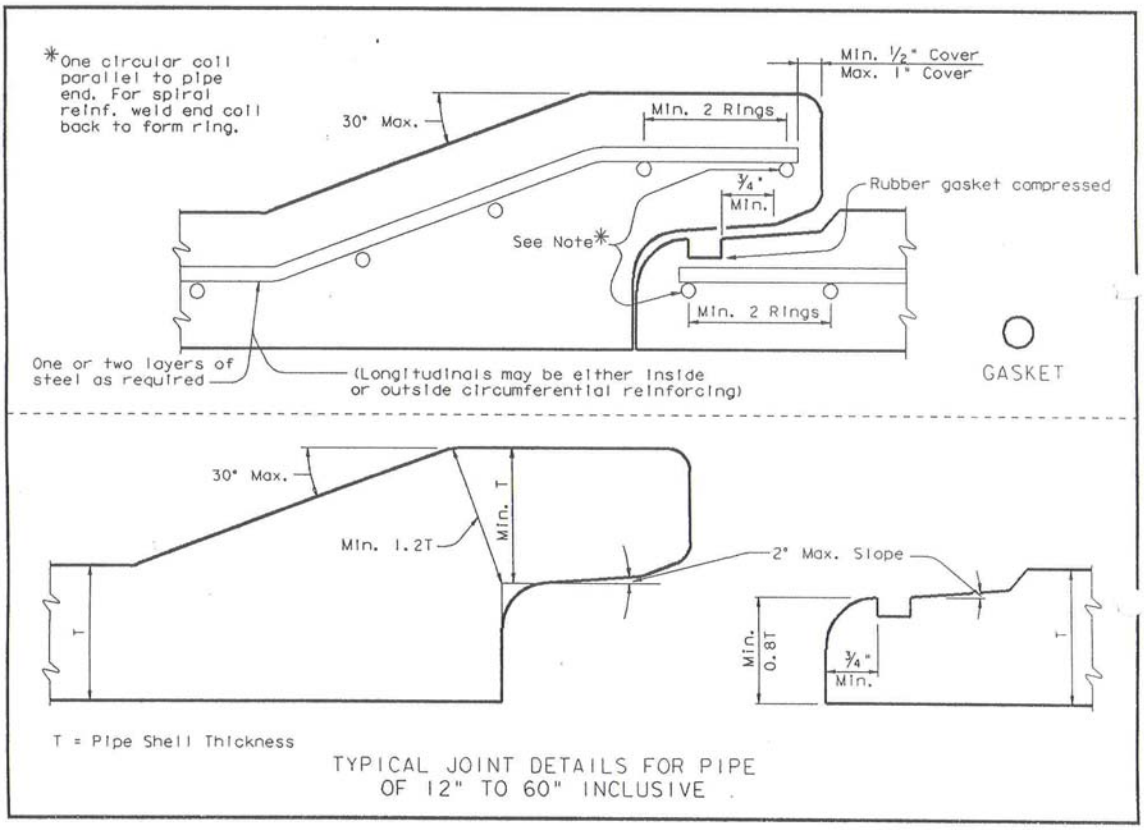
4. Measurement. This Item will be measured by the foot of pipe complete in place in accordance with these specifications. Such measurement will be made between the ends of the pipe barrel along the central axis as installed. Where spurs or branches, or connections to existing pipe lines are involved, measurement of the spur or new connecting pipe will be made from the intersection of its central axis with the outside surface of the pipe into which it connects. Where inlets, manholes, junction chambers or other structures are included in lines of pipe, that length of pipe provided for tying into the structure wall will be included for measurement but no other portion of the structure length or width will be included.

Excavation in natural ground for installing concrete pipe will be measured as prescribed in Item 400, "Excavation and Backfill for Structures".

Unless otherwise shown on the plans, structural excavation for pipe headwalls will not be measured but will be considered subsidiary to the various bid items.

5. Payment. The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Reinforced Concrete Low-Head Pressure Pipe" of the class and size specified. This price is full compensation for constructing, furnishing, transporting, placing, and jointing the pipe; the excavation, hauling and placing of earth cushion material where required for bedding pipe in rock excavation; the preparation and shaping of beds; hauling, placing and jointing of pipes; for end finish; for all connections to existing structures and for all other items of materials, labor, equipment, tools, and incidentals necessary to complete the pipe line in accordance with the plans and this Item, except excavation and backfill; which will be paid for in accordance with Item 400, "Excavation and Backfill for Structures". The excavation of rock or other incompressible materials, as may be required in providing proper bedding, will be paid for in accordance with Item 400, "Excavation and Backfill for Structures". Where pipes are laid on a skew, full compensation for cutting the ends parallel with the centerline of the highway will be considered as included in the price paid for linear foot for the designated item of pipe and no additional allowance will be made therefore.

Protection methods for excavations greater than 5 ft. in depth will be measured and paid for as required under Item 402, “Trench Excavation Protection,” or Item 403, “Temporary Special Shoring.”



TYPICAL JOINT DETAILS FOR PIPE OF 12" TO 60" INCLUSIVE